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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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2292	7590	09/06/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			WILLIAMS, LAWRENCE B	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

jK

Office Action Summary

Application No.

10/728,945

Applicant(s)

YOO ET AL.

Examiner

Lawrence B. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is rejected under the judicially created doctrine of double patenting over claim 15 of U. S. Patent No. 6,553,086 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claim 1 of the instant application discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock; a counter to count the clock generated by the clock generator

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such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **data object units** by adding count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, the corresponding unit of the digital data stream; while claim 15 of US Patent No.

6,553,086 B1 discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock, **the frequency of which is the same as the frequency of a clock used while the transport streams were created**; a counter to count the clock generated by the clock generator such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **transport stream units** by adding count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, the corresponding unit of the digital data stream. Though claim 15 of US Patent No.

6,553,086 B1 discloses the data formatter to create transport streams, it is well known in the art that the transport streams contain data objects. Therefore it is inherent that the data formatter of claim 15 also creates the claimed data objects of claim 1 of the instant application. Though claim 1 of the instant application does not disclose **the frequency of which is the same as the frequency of a clock used while the transport streams were created**, It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same functions before. In re Karlson, 136 USPQ 184 (CCPA).

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

4. Claims 2-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 as applied to claim 1 above and further in view of Kashiwagi et al. (US Patent 5,923, 869).

(1) With regard to claim 2, as noted above, US Patent No. 6,553,086 B1 discloses all limitations of claim 1 above. US Patent 6,553,086 B1 does not disclose wherein the data object units pertain to video data. However, Kashiwagi et al. teaches a method and an apparatus for reproducing bitstreams wherein the data object units pertain to video data (col. 1, lines 13-14).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 3, Kashiwagi et al. also discloses in Fig. 2, a recording part (1200) to record the data object units to a recording medium. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

(3) With regard to claim 4, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of

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the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

5. Claim 5 is rejected under the judicially created doctrine of double patenting over claims 11 and 15 of U. S. Patent No. 6,553,086 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. Though claim 11 discloses means rather than the actual components of the apparatus as disclosed in claim 15 of US Patent No. 6,553,086 B1, the means and components perform the same functions, respectively. The dependent claim 11 discloses the same limitations as disclosed in claim 5 of the instant application.

6. Claim 6 is rejected under the judicially created doctrine of double patenting over claim 8 of U. S. Patent No. 6,553,086 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claim 6 of the instant application discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: means for generating a clock; means for counting the generated clock such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined

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value and a bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and means for creating data object units by adding the count values of the bigger-unit time field and the smaller-unit time field at the time each unit of a digital data stream is received, to the corresponding unit of the digital data stream, while claim 8 of US Patent 6,553,086 No. B1 discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: means for generating a clock, **the frequency of which is the same as the frequency of a clock used while the transport streams were created**; means for counting the generated clock such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and a bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and means for creating data object units by adding the count values of the bigger-unit time field and the smaller-unit time field at the time each unit of a digital transport stream is received to the corresponding unit of the received transport stream, said each unit having a predetermined length. Though claim 8 of US Patent No. 6,553,086 B1 discloses the data formatter to create transport streams, it is well known in the art that the transport streams contain data objects. Therefore it is inherent that the data formatter of claim 8 of US Patent No. 6,553,086 B1 also creates the claimed data objects of claim 6 of the instant application. Though claim 6 of the instant application does not disclose **the frequency of which is the same as the frequency of a clock used while the transport streams were created**, It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same functions before. In re Karlson, 136 USPQ 184 (CCPA).

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Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

7. Claims 7-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,553,086 B1 as applied to claim 6 above, and further in view of Kashiwagi et al. (US Patent 5,923, 869).

(1) With regard to claim 7, as noted above, US Patent No. 6,553,086 B1 discloses all limitations of claim 6 above. US Patent 6,553,086 B1 does not disclose wherein the data object units pertain to video data. However, Kashiwagi et al. teaches a method and an apparatus for reproducing bitstreams wherein the data object units pertain to video data (col. 1, lines 13-14).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 8, Kashiwagi et al. also discloses in Fig. 2, a recording part (1200) to record the data object units to a recording medium. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

(3) With regard to claim 9, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of

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the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

8. Claim 10 is rejected under the judicially created doctrine of double patenting over claim 8 of U. S. Patent No. 6,553,086 B1 as applied to claim 6 above and further in view of claim 11, since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. The rejection of claim 6 in reference to claim 8 of US Patent 6,533,086 B1 is cited above. Furthermore, claim 11 of US Patent No. 6,553,086 B1 discloses the same limitations as disclosed in claim 10 of the instant application.

9. Claim 11 is rejected under the judicially created doctrine of double patenting over claim 15 of U. S. Patent No. 6,553,086 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claim 11 of the instant application discloses a method for recording time information of digital data streams received through an interface, the apparatus comprising: a generating a clock; counting the generated such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and creating **data object units** by

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adding the count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, to the corresponding unit of the digital data stream; while claim 15 of US Patent 6,553,086 B1 discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock, **the frequency of which is the same as the frequency of a clock used while the transport streams were created**; a counter to count the clock generated by the clock generator such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **transport stream units** by adding count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, the corresponding unit of the digital data stream. Claim 11 of the instant application simply discloses the method implemented by the apparatus of claim 15 of US Patent 6,553,086 B1. Though claim 15 of US Patent discloses the data formatter to create transport streams, it is well known in the art that the transport streams contain data objects. Therefore it is inherent that the data formatter of claim 15 of also creates the claimed data objects of claim 11 of the instant application. Though claim 11 of the instant application does not disclose **the frequency of which is the same as the frequency of a clock used while the transport streams were created**, It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same functions before. In re Karlson, 136 USPQ 184 (CCPA).

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application

which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968).

See also MPEP § 804.

10. Claims 12-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 as applied to claim 11 above, and further in view of Kashiwagi et al. (US Patent 5,923, 869).

(1) With regard to claim 12, as noted above, US Patent No. 6,553,086 B1 discloses all limitations of claim 15 above. US Patent 6,553,086 B1 does not disclose wherein the data object units pertain to video data. However, Kashiwagi et al. teaches a method and an apparatus for reproducing bitstreams wherein the data object units pertain to video data (col. 1, lines 13-14).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 13, Kashiwagi et al. also discloses in Fig. 2, a recording part (1200) to record the data object units to a recording medium. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

(3) With regard to claim 14, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

11. Claim 15 is rejected under the judicially created doctrine of double patenting over claims 11 and 15 of U. S. Patent No. 6,553,086 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. Though claim 11 discloses means rather than the actual components of the apparatus as disclosed in claim 15 of US Patent No. 6,553,086 B1, the means and components perform the same functions, respectively. The dependent claim 11 of US Patent No. 6,553,086 B1 discloses the same limitations as disclosed in claim 15 of the instant application.

12. Claims 16, 17, 19, 20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 in view of Kashiwagi et al. (US Patent 5,923, 869).

(1) With regard to claim 16, the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claim 1 of the instant application discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock; a counter to count the clock generated by the clock generator such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **data object units** by adding count values of bigger-unit field and the smaller-unit time field the

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counter the time each unit digital data stream received, the corresponding unit of the digital data stream; while claim 15 of US Patent No. 6,553,086 B1 discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock, **the frequency of which is the same as the frequency of a clock used while the transport streams were created**; a counter to count the clock generated by the clock generator such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **transport stream units** by adding count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, the corresponding unit of the digital data stream. Though claim 15 of US Patent No. 6,553,086 B1 discloses the data formatter to create transport streams, it is well known in the art that the transport streams contain data objects. Therefore it is inherent that the data formatter of claim 15 also creates the claimed data objects of claim 1 of the instant application. Though claim 1 of the instant application does not disclose **the frequency of which is the same as the frequency of a clock used while the transport streams were created**, It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same functions before. In re Karlson, 136 USPQ 184 (CCPA). Claim 15 of US Patent No. 6,553,086 B1 does not disclose wherein the data objects carry management data.

However, Kashiwagi et al. discloses in Fig. 19, a method and apparatus for reproducing bitstreams wherein the data carry management data (col. 4, lines 23-24).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 17, Kashiwagi et al. also discloses in Fig. 19, wherein the management data include time information (SCR) for managing the digital data stream. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(3) With regard to claim 19, Kashiwagi et al. also discloses in Fig. 2, a recording part (1200) to record the data object units to a recording medium. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

(4) With regard to claim 20, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

13. Claim 18 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 in view of

Kashiwagi et al. (US Patent 5,923, 869) as applied to claim 17 above, and further in view of Kawamura et al. (US Patent 6,075,920).

As noted above, claim 15 of US Patent No. 6,553,086 B1 in combination with Kashiwagi et al. (US Patent 5,923, 869) disclose all limitations of claim 17. They do not teach wherein a format of the time information coincides with a format of time information of user data in the digital data stream. However, Kawamura et al. teaches a method and apparatus for recording/reproducing data wherein a format of the time information coincides with a format of time information of user data in a digital data stream (col. 6, lines 1-13). It would have been obvious to incorporate the teaching of Kawamura et al. with the combination teachings of claim 15 of US Patent No. 6,553,086 B1 and Kashiwagi et al. as a method supporting a variety of reproducing methods and proving improved usability (col. 3, lines 54-62).

14. Claims 21, 22, 24, 25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,553,086 B1 as applied to claim 6 above, and further in view of Kashiwagi et al. (US Patent 5,923, 869).

Claim 21 inherits all limitations of claim 6, above. As noted above, claim 8 of US Patent No. 6,553,086 B1 discloses all limitations of claim 6. Claim 8 of US Patent No. 6,553,086 B1 does not disclose wherein the data object units carry management data. However Kashiwagi et al. discloses in Fig. 19, a method and apparatus for reproducing bitstreams wherein the data carry management data (col. 4, lines 23-24).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 22, Kashiwagi et al. also discloses in Fig. 19, wherein the management data include time information (SCR) for managing the digital data stream. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(3) With regard to claim 24, Kashiwagi et al. also discloses in Fig. 2, a recording part (1200) to record the data object units to a recording medium. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

(4) With regard to claim 25, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

15. Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,553,086 B1 in view of

Kashiwagi et al. (US Patent 5,923, 869) as applied to claim 22 and further in view of Kawamura et al. (US Patent 6,075,920).

As noted above, claim 8 of US Patent No. 6,553,086 B1 in combination with Kashiwagi et al. (US Patent 5,923, 869) disclose all limitations of claim 22. They do not teach wherein a format of the time information coincides with a format of time information of user data in the digital data stream. However, Kawamura et al. teaches a method and apparatus for recording/reproducing data wherein a format of the time information coincides with a format of time information of user data in a digital data stream (col. 6, lines 1-13). It would have been obvious to incorporate the teaching of Kawamura et al. with the combination teachings of claim 8 of US Patent No. 6,553,086 B1 and Kashiwagi et al. as a method supporting a variety of reproducing methods and proving improved usability (col. 3, lines 54-62).

16. Claims 26, 27, 29, 30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 in view of Kashiwagi et al. (US Patent 5,923, 869).

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claim 26 of the instant application discloses a method for recording time information of digital data streams received through an interface, the apparatus comprising: a generating a clock; counting the generated such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and creating **data object units** by

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adding the count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, to the corresponding unit of the digital data stream; while claim 15 of US Patent 6,553,086 B1 discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock, **the frequency of which is the same as the frequency of a clock used while the transport streams were created**; a counter to count the clock generated by the clock generator such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **transport stream units** by adding count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, the corresponding unit of the digital data stream. Claim 26 of the instant application simply discloses the method implemented by the apparatus of claim 15 of US Patent 6,553,086 B1. Though claim 15 of US Patent discloses the data formatter to create transport streams, it is well known in the art that the transport streams contain data objects. Therefore it is inherent that the data formatter of claim 15 of also creates the claimed data objects of claim 26 of the instant application. Though claim 26 of the instant application does not disclose **the frequency of which is the same as the frequency of a clock used while the transport streams were created**, It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same functions before. In re Karlson, 136 USPQ 184 (CCPA).

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application

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which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968).

See also MPEP § 804.

Claim 15 of US Patent No. 6,553,086 B1 does not disclose wherein the data objects carry management data.

However, Kashiwagi et al. discloses in Fig. 19, a method and apparatus for reproducing bitstreams wherein the data carry management data (col. 4, lines 23-24).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 27, Kashiwagi et al. also discloses in Fig. 19, wherein the management data include time information (SCR) for managing the digital data stream. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(3) With regard to claim 29, Kashiwagi et al. also discloses in Fig. 2, a recording part (1200) to record the data object units to a recording medium. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

(4) With regard to claim 30, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US

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Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

17. Claim 28 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 in view of Kashiwagi et al. (US Patent 5,923, 869) as applied to claim 27 above and further in view of Kawamura et al. (US Patent 6,075,020).

As noted above, claim 15 of US Patent No. 6,553,086 B1 in combination with Kashiwagi et al. (US Patent 5,923, 869) disclose all limitations of claim 27. They do not teach wherein a format of the time information coincides with a format of time information of user data in the digital data stream. However, Kawamura et al. teaches a method and apparatus for recording/reproducing data wherein a format of the time information coincides with a format of time information of user data in a digital data stream (col. 6, lines 1-13). It would have been obvious to incorporate the teaching of Kawamura et al. with the combination teachings of claim 15 of US Patent No. 6,553,086 B1 and Kashiwagi et al. as a method supporting a variety of reproducing methods and proving improved usability (col. 3, lines 54-62).

18. Claims 31, 32, 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 in view of Kashiwagi et al. (US Patent 5,923, 869).

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter,

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as follows: Claim 31 of the instant application discloses a recording medium for recording time information of digital data streams received through an interface, the recording medium comprising: generating a clock; wherein the **data object units** are created by adding the count values of bigger-unit field and the smaller-unit time field at the time each unit of a digital data stream is received, to the corresponding unit of the digital data stream, wherein the count values are generated, such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; while claim 15 of US Patent 6,553,086 B1 discloses an apparatus for recording time information of digital data streams received through an interface, the apparatus comprising: a clock generator to generate a clock, **the frequency of which is the same as the frequency of a clock used while the transport streams were created**; a counter to count the clock generated by the clock generator such that a smaller-unit time field is reset when the count value of the smaller-unit time field reaches a predetermined value and bigger-unit time field is incremented by 1 when the smaller-unit time field is reset; and a data formatter create **transport stream units** by adding count values of bigger-unit field and the smaller-unit time field the counter the time each unit digital data stream received, the corresponding unit of the digital data stream. Though claim 15 of US Patent discloses the data formatter to create transport streams, it is well known in the art that the transport streams contain data objects. Therefore it is inherent that the data formatter of claim 15 of also creates the claimed data objects of claim 31 of the instant application. A recording layer and data object unit or transport streams recording on the recording layer would be inherent to the recording apparatus of claim 15 of US Patent 6,553,086 B1. Though claim 31 of the instant application does not disclose **the frequency of**

which is the same as the frequency of a clock used while the transport streams were created, It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same functions before. In re Karlson, 136 USPQ 184 (CCPA).

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim 15 of US Patent No. 6,553,086 B1 does not disclose wherein the data objects carry management data. However, Kashiwagi et al. discloses in Fig. 19, a method and apparatus for reproducing bitstreams wherein the data carry management data (col. 4, lines 23-24).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(2) With regard to claim 32, Kashiwagi et al. also discloses in Fig. 19, wherein the management data include time information (SCR) for managing the digital data stream. It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced (col. 3, lines 3-7).

(3) With regard to claim 34, Kashiwagi et al. also discloses wherein the recording medium is a DVD (col. 4, lines 39-40). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Kashiwagi et al. with the teachings of US

Patent 6,553,086 B1 to provide an optical disk medium from which data can be seamlessly reproduced.

19. Claim 33 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 6,553,086 B1 in view of Kashiwagi et al. (US Patent 5,923, 869) as applied to claim 32 above and further in view of Kawamura et al. (US Patent 6,075,020).

As noted above, claim 15 of US Patent No. 6,553,086 B1 in combination with Kashiwagi et al. (US Patent 5,923, 869) disclose all limitations of claim 32. They do not teach wherein a format of the time information coincides with a format of time information of user data in the digital data stream. However, Kawamura et al. teaches a method and apparatus for recording/reproducing data wherein a format of the time information coincides with a format of time information of user data in a digital data stream (col. 6, lines 1-13). It would have been obvious to incorporate the teaching of Kawamura et al. with the combination teachings of claim 15 of US Patent No. 6,553,086 B1 and Kashiwagi et al. as a method supporting a variety of reproducing methods and proving improved usability (col. 3, lines 54-62).

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.) Nozaki et al. discloses in US Patent 6,243,353 B1 Recording/Playback Apparatus Using Recording Reservation Information Written Onto Recording Medium.

b.) Sako et al. discloses in US Patent 6,226,247 B1 Data Recording Apparatus That Identifies the Type of Data in Each Block of Data.

c.) Okada et al. discloses in US Patent 6,181,870 B1 Optical Disc Having an Area Storing Original and User Chain Information Specifying at Least Part of a Video Object Stored on The Disc, and a Computer Program and Recording Apparatus for Recording and Editing the Chain Information.

d.) Okada et al. discloses in US Patent 6,148,140 Video Data Editing Apparatus, Optical Disc for Use as a Recording Medium of a Video Data Editing Apparatus, and Computer Readable Recording Medium Storing an Editing Program.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/728,945

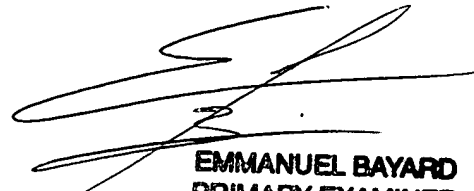
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Lawrence B. Williams

lbw

August 27, 2005



EMMANUEL BAYARD
PRIMARY EXAMINER